

REMARKS

Claims 24-27, 31-68 and 70-94 are currently pending in the application. Claims 24-27 and 31-63 are withdrawn. Claims 64, 65, 67, 68, 73, 76, and 85 are amended. The amendments find support in the specification and are discussed in the relevant sections below. No new matter is added.

Specification

The Office Action states that the specification is objected to because Tables 2A and 2B contain amino acid sequences that are not referenced by a sequence identifier number. Both Tables 2A and 2B are amended herein to include proper SEQ ID NOs. In addition, a replacement sequence listing is being filed herewith to include the sequences of Tables 2A and 2B.

Rejection of Claims 65, 66, 68, 71, and 73-81 Under 35 U.S.C. §112, Second Paragraph

The Office Action states that claims 65, 66, 68, 71, and 73-81 are rejected under §112, second paragraph for alleged indefiniteness. Applicants respectfully traverse the rejection.

The Office Action states that claims 65, 68, 73, and 76 (and their dependents) are indefinite in the inclusion of "SEQ ID NO: 10," as it is unclear what is being referring to as having the sequence of SEQ ID NO: 10. Applicants have amended these claims to obviate the rejection, and request that the rejection be withdrawn in view of the current amendments.

The Office Action also states that claims 68, 71, and 72 are indefinite for lack of proper antecedent basis. These claims are amended herein to clarify their dependency and to include proper antecedent basis.

In view of the foregoing, Applicants request that the rejection be reconsidered and withdrawn.

Rejection of Claims 64-94 Under 35 U.S.C. §112, First Paragraph

The Office Action states that claims 64-94 are rejected under §112, first paragraph for allegedly containing subject matter that is not supported by the specification at the time of filing. The Office Action states that the claimed combination of Archaeal DNA polymerase and mutant Archaeal DNA polymerase comprising a 3'-5' exonuclease activity and a reduced DNA polymerization activity is not supported by the specification.

Claims 64 and 85 are amended herein such that the first enzyme is no longer referred to as an "Archaeal DNA polymerase." Instead, the claims as amended recite a first enzyme that "comprises a polymerization activity of a DNA polymerase or reverse transcriptase." This amendment and the combination of the first enzyme (as amended) and mutant Archaeal DNA polymerase are supported by the specification as filed. The specification teaches on page 3, lines 12-15 that the invention includes an enzyme mixture comprising a first enzyme that "comprises a DNA polymerization activity" and a second enzyme that "comprises a 3'-5' exonuclease activity and a reduced DNA polymerization activity." The specification teaches at line 16 that the first enzyme can be a DNA polymerase or reverse transcriptase. The specification teaches at line 21 that the second enzyme is preferably a mutant DNA polymerase. In addition, the specification teaches at page 27, lines 1-3 that the invention includes a mutant of an Archaeal DNA polymerase with reduced polymerase activity and retained proofreading activity.

Accordingly, the amended claims are fully supported by the specification, and Applicants therefore request that the rejection be reconsidered and withdrawn.

Applicants submit that all claims are allowable as written and respectfully request early favorable action by the Examiner. If the Examiner believes that a telephone conversation with Applicant's attorney/agent would expedite prosecution of this application, the Examiner is cordially invited to call the undersigned attorney/agent of record.

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Respectfully submitted,



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